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| APPLICATION NO.  | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|--|-------------|----------------------|---------------------|------------------|
| 10/637,171   | 08/07/2003  | Ruth Amaru           | SVL920060529US1     | 2915             |
| 49330  | 7590        | 03/06/2009           | EXAMINER            |                  |
| DUKE W. YEE<br>P.O. BOX 802333<br>YEE & ASSOCIATES, P.C.<br>DALLAS, TX 75380 |             |                      | NGUYEN, TAN D       |                  |
|  |             |                      | ART UNIT            | PAPER NUMBER     |
|  |             |                      | 3689                |                  |
|  |             |                      | NOTIFICATION DATE   | DELIVERY MODE    |
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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

ptonotifs@yeeiplaw.com

|                              |                                       |                                     |  |
|------------------------------|---------------------------------------|-------------------------------------|--|
| <b>Office Action Summary</b> | <b>Application No.</b><br>10/637,171  | <b>Applicant(s)</b><br>AMARU ET AL. |  |
|                              | <b>Examiner</b><br>Tan Dean D. Nguyen | <b>Art Unit</b><br>3689             |  |

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 30 October 2008.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-95 is/are pending in the application.
- 4a) Of the above claim(s) 1-48 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 49-95 is/are rejected.
- 7) ☒ Claim(s) 67 and 72-78 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 19 February 2007 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>10/20/06</u> .  | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Election/Restrictions***

1. Applicant's election without traverse of Group II, claims 49-95, in the reply filed on 10/30/08 is acknowledged. Claims 1-48 are withdrawn. The claims comprise:

1) Method: 49-94, and

2) article: 95.

As of 10/30/2008, independent method claim 49 is as followed:

49. (Previously Presented) A method, implemented in a data processing system, for interactively viewing enterprise metadata, comprising:

a) providing a data structure in the form of a graph, with nodes of the graph representing asset metadata for enterprise data assets and edges of the graph representing relationships between the asset metadata;

b) generating at least one path within the graph, wherein the path satisfies prescribed constraints; and

c) generating a report about the graph, wherein the report is based on paths generated by said path finder.

Note: for convenience, letters (a)-(c) are added to the beginning of each step.

### ***Information Disclosure Statement***

2. The information disclosure statement (IDS) submitted on 10/20/06 was filed after the mailing date of the application on 8/3/03. The submission is in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statement is being considered by the examiner.

***Claim Rejections - 35 USC § 101***

3. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

4. Claims 49-94 and 95 are rejected under 35 U.S.C. 101 because in order for a method to be considered a "process" under §101, a claimed process must either:

(1) be tied to another statutory class of invention (such as a particular apparatus)

or

(2) transform underlying subject matter (such as an article or materials) to a different state or thing. (See at least *Diamond v. Diehr*, 450 U.S. 175, 184 (1981); *Parker v. Flook*, 437 U.S. 584, 588 n.9 (1978); *Gottschalk v. Benson*, 409 U.S. 63, 70 (1972); *Cochrane v. Deener*, 94 U.S. 780, 787-88 (1876)). If neither of these requirements is met by the claim, the method is not a patent eligible process under §101 and is non-statutory subject matter.

With respect to claims 49-94 and 95, the claim language does not include the required (1) tied to a particular machine or apparatus, or (2) transforms a particular article to a different state or thing, and thus is directed to nonstatutory subject matter. Method claims 49 and 95 recite "[A] method, implemented in a data processing system". Claim 49 additionally requires, "generating a report about the graph" These are the only limitations which could arguably be construed to tie the claimed process to a particular

machine under the first prong of the machine-or-transformation test. This is the exact issue that the court in *Bilski* declined to decide. *Bilski* at 961-62. The court did, however, provide some guidance when it explained that the use of a specific machine must impose meaningful limits on the claim's scope to impart patent-eligibility. *Id.*

The recitation in the preamble of "[A] method, implemented in a data processing system", adds nothing more than a general purpose data processing system or computer that is associated with the steps of the process in an unspecified manner. Such a field-of-use limitation is insufficient to render an otherwise ineligible process claim patent eligible. *Bilski*, 545 F.3d at 957, citing *Diehr*, 450 U.S. at 191-92 (noting that eligibility under § 101 "cannot be circumvented by attempting to limit the use of the formula to a particular technological environment."). This recitation, therefore, fails to impose any meaningful limits on the claim's scope. Furthermore, the preamble is considered as "being capable of" and thus having no patentable weight. Also, the term "system" also reads on software components and thus are not apparatus or machine per say.

Regarding claim 49, the step of "generating a report" need not be performed by any particular structure. It may be accomplished simply by writing the report (information about a task or project) on a piece of paper. A conclusion that such post-solution activity is sufficient to impart patentability to a claim involving the solving of a mathematical algorithm would exalt form over substance. This step is, therefore, insufficient to impart patentability to a claim involving the solving of a mathematical algorithm.

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The steps of process claims 49 and 95 also fail the second prong of the machine-or-transformation test because the report (or information or data) does not represent physical and tangible objects. Rather, the report represents information about a graph, an intangible object. There are no transforming the underlying subject matter (such as an article or materials) to a different state or thing.

***Claim Objections***

5. Claim 67 is objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form. It's not clear how claim 67 further limits the steps of claim 49 above?

6. Claims 72-76 are objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form. It's not clear how claim 67 with the limitation of "generating program code instructions corresponding to a report" further limits the steps of claim 49 above?

7. Claims 77-78 are objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form. It's not clear how claims 77-78 with the limitation of "generating a request..." further limits the steps of claim 49 above?

***Claim Rejections - 35 USC § 112***

8. Claims 49-95 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

1) In independent claims 49 and 95:

(1) it's not clear how the edges of the graph representing relationships between the asset metadata?

Also, (2) it's not clear how the path satisfies prescribed constraints and what are the constraints and how they are connected to the elements of steps (a) and ( c)? and

(3) it's not clear how the report is based on paths generated by the path finder.

The examiner has looked into the specifications but cannot determine how these items are carried out?

9. Claims 49 and 95 recite the limitation "prescribed constraints" in step (b). There is insufficient antecedent basis for this limitation in the claim.

***Claim Rejections - 35 USC § 103***

10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.



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11. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

12. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

13. Claims 49-95 are rejected under 35 U.S.C. 103(a) as being unpatentable over WACHTEL.

As for independent claims 49 and 95, WACHTEL fairly discloses a method and a computer-readable storage medium, implemented in a data processing system, for interactively viewing enterprise metadata, comprising:

a) providing a data structure in the form of a graph/diagram, with nodes of the graph representing asset metadata for enterprise data assets and edges of the graph representing relationships between the asset metadata;

{see Figs. 3, 7a, 7b, 9 and 11}

b) generating at least one path within the graph, wherein the path displays the several functions between the elements such as status, message, or relationship; and

{see Figs. 3, 5, 7a, 7b, 9 and 11}

c) generating a report about the graph, wherein the report is based on paths generated by said path finder.

{see Fig. 1, “Data Result”, Fig. 3, Fig. 8, element 608 “Results Document”}

WACHTEL fairly teaches the claimed invention except for the function of the path in step (b), i.e. satisfies prescribed constraints. However, in view of the teachings of several features of the relationships between the elements, it would have been obvious to include other function on the path such as satisfies prescribed constraints as mere applying other similar function to achieve similar results. Furthermore, it appears that this function is considered as non-functional descriptive material (NFDM) on the path data of “...”, thus having no patentable weight. The mere insertion of “constraints” data over “data” does not “impart functionality when employed as a computer component”, thus having no patentable weight.

See MPEP 2106.01 “Descriptive material can be characterized as either “functional descriptive material” or “nonfunctional descriptive material.” In this context, “functional descriptive material” consists of data structures and computer programs which impart functionality when employed as a computer component. (The definition of “data structure” is “a physical or logical relationship among data elements, designed to support specific data manipulation functions.” The New IEEE Standard Dictionary of

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Electrical and Electronics Terms 308 (5th ed. 1993).) “Nonfunctional descriptive material” includes but is not limited to music, literary works, and a compilation or mere arrangement of data.

As for dep. claims 50-66, 68-71, 83-88 (part of 49 above) which deal with the features of the report or the results of the documents or report, these appear to be taught on Figs. 3, 8 and 12. Furthermore, the generation of the report is a function of the request, and it would have been obvious to generate a variety of different types of reports based on the variety of the requests. Also, the features of the reports or the information on the reports are considered as NFDM and having no patentable weight for the same reason set forth above.

As for dep. claims 67-68 (part of 49 above) which deal with well known database management parameters, i.e. identifying redundancies among data and a plan for eliminating them, these are inherently included in the database management of WACHTEL or would have been obvious to do so to maximize the database efficiency or keeping storage space from filling up with redundant or unneeded data.

As for dep. claims 72-79 (part of 49 above) which deal with program code instructions types, these are taught on Figs. 11, 3, cols. 19 and 15 and 24.

As for dep. claims 77-78 (part of 49 above) which deal with the features of generating a request, these are taught on Fig. 10, col. 16, lines 30-67.

As for dep. claims 79-82 (part of 49 above) which deal with the features of the graph, i.e. nodes, ontology model, etc., these are taught on Figs. 3, 4, 5 and 7a and 7b, and Fig. 9.

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As for dep. claims 89-91 (part of 49 above) which deal with well known user access/restriction parameters with respect to data/metadata, these are taught on cols. 6-7, col. 8, lines 12-50.

As for dep. claims 92-94 (part of 49 above) which deal with well known displaying parameters with respect to data/metadata, these are taught on Figs. 1, 11 and 13.

No claims are allowed.

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14. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through private PAIR only. For more information about the PAIR system, see <http://pair-direct@uspto.gov>. Should you have any questions on access to the private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll free).

In receiving an Office Action, it becomes apparent that certain documents are missing, e. g. copies of references, Forms PTO 1449, PTO-892, etc., requests for copies should be directed to Tech Center 3600 Customer Service at (571) 272-3600, or e-mail [CustomerService3600@uspto.gov](mailto:CustomerService3600@uspto.gov).

Any inquiry concerning the merits of the examination of the application should be directed to Dean Tan Nguyen at telephone number (571) 272-6806. My work schedule is normally Monday through Friday from 6:30 am - 4:00 pm. I am scheduled to be off every other Friday. Should I be unavailable during my normal working hours, my supervisor Janice Mooneyham can be reached at (571) 272-6805. The main FAX phone numbers for formal communications concerning this application are (571) 273-8300. My personal Fax is (571) 273-6806. Informal communications may be made, following a telephone call to the examiner, by an informal FAX number to be given.

/Tan Dean D. Nguyen/  
Primary Examiner, Art Unit 3689